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OGILVY RENAULT
1981 MCGILL COLLEGE AVENUE
SUITE 1600
MONTREAL, QC H3A2Y3
CANADA

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| EXAMINER |
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THAI, HANH B

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| ART UNIT | PAPER NUMBER |
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2171

DATE MAILED: 09/07/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,828

Applicant(s)

MCDONALD ET AL.

Examiner

Hanh B Thai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2.3.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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This is in response to an application filed November 16, 2001 in which claims 1-22 are presented for examination.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1-14, it is not clear what is “respective associated”. One of ordinary skill in the art would not know what “respective associated stored CDC” is and where it is stored.

Regarding claims 15-22, it is not clear what “corresponding stored CDC” is and one of ordinary skill in the art would not know how to do “comparing the current CDC with a corresponding stored CDC.”

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Novak et al. (WO 01/03409).

Regarding claim 1, Novak discloses a method for identifying changed records in a file on an electronic token, the method comprising steps of:

- calculating at least one change detection code (CDC) for records of the file (see page 6, lines 1-3, Novak);
- comparing the calculated CDC with a respective associated, stored CDC in order to determine if at least one associated record has changed since the stored CDC was calculated (see page 2, lines 13-22 and page 4, lines 1-12, Novak); and
- if the calculated CDC is not equal to the stored CDC, executing a predefined algorithm to effect registration of a change, and saving the calculated CDC as the stored CDC (see page 6, line 25 to page 7, line 3, Novak).

Regarding claim 2, Novak further discloses a step of calculating a cyclic redundancy check (see page 6, lines 1-10, Novak).

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Regarding claim 3, Novak further discloses a step of determining if the at least one associated record is changed and yields information regarding the change, the information being input to the predefined algorithm (page 6, lines 1-10, Novak).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novak et al. (WO 01/03409) in view of Kilner (US 5,649,089).

Regarding claim 4, Novak discloses all of the claimed limitation as discussed above except the step of issuing a message to an electronic token reader in which the electronic token is docked, the message containing at least one parameter regarding the change for use by a registering element to which the message is sent by a token-resident applet via the electronic token reader. Kilner, on the other hand, discloses the managing the routing of messages to the wireless subscriber units (see col. 3, lines 14-40, Kilner). It would have been obvious to apply the maintaining database system of Kilner into the Novak for calculating a cyclic redundancy check. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Novak as taught by Kilner to include the claim feature. The motivation of doing would have been to provide software efficiency and increase hardware's performance (page 1, lines 19-20, Novak).

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Regarding claim 5, Novak/Kilner combination disclose a step of setting a response pending flag which is cleared if an acknowledgement of the message is received, wherein the flag is used to indicate that a message was not acknowledged (col. 4, lines 4-10, Kilner).

Regarding claim 6, Novak/Kilner combination discloses a step of setting one of a plurality of flags for each change depending on a type of change, so that different types of change can be differentiated (col. 4, lines 26-54, Kilner).

Regarding claim 7, Novak/Kilner combination disclose a step of using any flag set in association with the stored CDC, in conjunction with the values of the stored CDC and calculated CDC to determine if the record was changed since a last acknowledged message related to the record was sent (see col.4, lines 21-26, Kilner).

Regarding claim 8, Novak/Kilner combination disclose a step of sending the message to the registering element, which performs at least one of: synchronization of data across multiple data stores; update of a system with respect to the record; back-up of the record; and provision of a service feature in dependence on the change to the record (page 2, line 14 to page3, line 20, Novak).

3. Claims 4-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Novak et al. (WO 01/03409) in view of Sellers et al. (GB 2373139).

Regarding claim 4, Novak discloses all of the claimed limitation as discussed above except the step of issuing a message to an electronic token reader in which the electronic token is docked, the message containing at least one parameter regarding the change for use by a registering element to which the message is sent by a token-resident applet via the electronic token reader. Sellers, on the other hand, discloses a backup system including the transmission of

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a message between a network and a mobile station (see pages 18-19, Sellers). It would have been obvious to apply the backup system of Sellers into the Novak because it would provide software flexibility of restore an accidental deletion or corruption of data record on the electronic token. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Novak as taught by Sellers to include the claim feature. The motivation of doing would have been to provide software efficiency and increase hardware's performance (page 1, lines 19-20, Novak).

Regarding claim 5, Novak/Sellers combination disclose a step of setting a response pending flag which is cleared if an acknowledgement of the message is received, wherein the flag is used to indicate that a message was not acknowledged (page 27, line 20 to page 28, line 5 and page 30, lines 13-14, Sellers).

Regarding claim 6, Novak/Sellers combination disclose a step of setting one of a plurality of flags for each change depending on a type of change, so that different types of change can be differentiated (page 29, line 23 to page 30, line 4, Sellers).

Regarding claim 7, Novak/Sellers combination discloses a step of using any flag set in association with the stored CDC, in conjunction with the values of the stored CDC and calculated CDC to determine if the record was changed since a last acknowledged message related to the record was sent (page 30, lines 14-20, Sellers).

Regarding claim 8, Novak/Sellers combination disclose a step of sending the message to the registering element, which performs at least one of: synchronization of data across multiple data stores; update of a system with respect to the record; back-up of the record; and provision of

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a service feature in dependence on the change to the record (page 2, line 14 to page 3, line 20, Novak).

Regarding claim 9, Novak/Sellers combination disclose steps of issuing a short message service message to a service provider that has access to the registering element (page 20, line 19 to page 21, line 6, Sellers).

Regarding claim 10, Novak/Sellers combination disclose steps of: receiving information relating to the change; formulating a notice of change (NOC) message; and inserting as many NOC messages as possible into the SMS message before sending the SMS message.

Regarding claim 11, Novak/Sellers combination disclose that the electronic token is a subscriber identity module and the step of comparing further comprises a step of applying a comparison algorithm that executes on the subscriber identity module, the comparison algorithm being adapted to compare a CDC of each of a plurality of abbreviated dialing numbers in the file (fig. 10 and corresponding text, Sellers); and the step of issuing comprises a step of directing a SMS message to the registering element, which is adapted to perform at least one of the following: ensure conformity of the file with other versions of the file stored elsewhere; back-up the file; and, provide a service feature in dependence on the change (page 21, lines 1-10, Sellers).

Regarding claim 12, Novak/Sellers combination disclose steps of formulating the message by inserting the at least one parameter into respective fields of the message, and forwarding the message to the registration element (pages 37-38, Sellers).

Regarding claim 13, Novak/Sellers combination disclose steps of inserting a record identifier, and information that specifies the change (page 40, lines 9-21, Sellers).

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Regarding claim 14, Novak/Sellers combination disclose a step of inserting a value that indicates one of the following: the record was added; the record was deleted; and the record was modified (page 34, line21 to page 35, line 1, Sellers).

Regarding claim 15, Novak discloses an apparatus for providing a service to a subscriber having an electronic token, the apparatus comprising:

a change detection applet stored on the electronic token (see page 6, lines 1-3, Novak) adapted to be executed by a processor of the electronic token, the applet being adapted to identify records that have been changed since a change detection code (CDC) was calculated and stored in a memory of the electronic token, by calculating at least one current CDC for the records, and comparing the current CDC with a corresponding stored CDC (see page 2, lines 13-22 and page 4, lines 1-12, and see page 6, line 25 to page 7, line3, Novak).

Novak, however, does not disclose the sending a notice of change (NOC) message to a registering element for registering detected changes. Sellers, on the other hand, discloses a backup system including the transmission of a message between a network and a mobile station (see pages 18-19, Sellers). It would have been obvious to apply the backup system of Sellers into the Novak because it would provide software' flexibility of restore an accidental deletion or corruption of data record on the electronic token. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Novak as taught by Sellers to include the claim feature. The motivation of doing would have been to provide software efficiency and increase hardware's performance (page 1, lines 19-20, Novak).

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Regarding claim 16, Novak/Sellers combination discloses the change detection applet calculates a cyclic redundancy check (CRC) to derive the current CDC (see page 6, lines 1-10, Novak).

Regarding claim 17, Novak/Sellers combination discloses back up records for which the NOC message was generated; synchronize the file with other files remotely stored but commonly associated with a subscriber; and, provide a service dependent upon the detected change (page 4, lines 13-20, Novak).

Regarding claim 18, Novak/Sellers combination discloses the electronic token is docked in a communications enabled device that comprises an electronic token reader adapted to exchange data in conformity with a predetermined protocol (page 22 and page 23, lines 1-14, Sellers).

Regarding claim 19, Novak/Sellers combination discloses a subscriber identity module (SIM) card compliant with a global system for mobile communications (GSM) standard; and a universal SIM (USIM) card (see Fig.2-3 and corresponding text, Novak).

Regarding claim 20, Novak/Sellers combination discloses the communications enabled device is adapted to function as a short message service (SMS) enabled telephone (see page 6, lines 14-23, Sellers).

Regarding claim 21, Novak/Sellers combination discloses a data store for storing a set of response pending flags that are associated with a list of records in the file, and the change detection applet is further adapted to use the set of response pending flags to determine if a record may have been changed since a last NOC message for the record was acknowledged (see Fig.17 and corresponding text, Sellers).

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Regarding claim 22, Novak/Sellers combination discloses the set of response pending flags comprises at least two flags used to encode change information, and the change detection applet is further adapted to use the plurality of flags, in conjunction with the stored CRC and current CRC, to determine if a notice of change message related to the record is to be sent (see page 40, lines 12-21, Sellers).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chase, Jr. (US 5,974,238) discloses automatic data synchronization between a handheld and a host computer.

Hubble et al. (US 6,278,885) disclose a mobile phone using subscriber identification card for updating information stored therein.

Leung (US 5,913,160) discloses method and system for updating replicated databases in foreign and home telecommunication network systems.

Fox (US 5,765,172) discloses system and method for verifying integrity of replicated databases.

Salkewicz et al. (US 5,970,502) disclose method and apparatus for synchronizing multiple copies of a database.


Kozik et al. (US 5,309,501) disclose arrangement for detecting fraudulently identified mobile stations in a cellular mobile telecommunications network.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh B Thai whose telephone number is 703-305-4883 and 571-2724029 after October 21, 2004. The examiner can normally be reached on 8 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hanh Thai 
Art Unit 2171
September 3, 2004


UYEN LE
PRIMARY EXAMINER